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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,821	09/04/2006	Yatendra Kumar	RLL-347US	3659
26815 RANBAXY IN	7590 10/04/2007		EXAMINER	
600 COLLEGE ROAD EAST			CARR, DEBORAH D	
SUITE 2100 PRINCETON, NJ 08540		ART UNIT	PAPER NUMBER	
			1621	
			MAIL DATE	DELIVERY MODE
			10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/549,821	KUMAR ET AL.				
• Office Action Summary	Examiner	Art Unit				
	Deborah D. Carr	1621				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•					
Responsive to communication(s) filed on  2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  3) ☐ Since this application is in condition for allowan closed in accordance with the practice under E	action is non-final.					
Disposition of Claims						
4) ☐ Claim(s) 1-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-26 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original of the correction and the original of the correction of the original of the correction of the original of the original of the correction of the original of the original of the original ori	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ■ All b) ■ Some * c) ■ None of:  1. ■ Certified copies of the priority documents have been received.  2. ■ Certified copies of the priority documents have been received in Application No  3. ■ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 9/06.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te				

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## **DETAILED ACTION**

## Claim Objections

1. Claims 16-21 are objected to as being drawn to compounds in the context of a product-by-process claim format. The objection is based on the fact that the compounds produced by the process are definite as to their meaning. As such, claims to the compounds can stand-alone. Product-by-process claim language is reserved for situations where the compound cannot be claimed in a definite manner. The instant application does not fall into this category, as the compounds are definite. Further, there is no showing that the process of making imparts new and unobvious properties to the compounds themselves.

Therefore, product-by-process claims 16-21 will be treated as compound claims for the purpose of this examination.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-10, 12-20 rejected under 35 U.S.C. 102(b) as being anticipated by Hirschmann.

Hirschmann teaches sulphated oil wherein the oil is sulfonated with sulfuric acid at temperatures below 40°C and neutralized with sodium hydroxide.

4. Claims 1-21 rejected under 35 U.S.C. 102(b) as being anticipated by Friese et al. (US Pat. 4,741,738.

Sulfonation may be carried out in a known manner with sulfuric acid or oleum, 100 parts by weight of the mixture of (A) and (B) being reacted with from 10 to 20 parts by weight of the sulfonating agent with stirring and thorough cooling. The reaction products are homogeneous and readily stirrable until the reaction is completed. After any excess of sulfonating agent has been washed out, the products are neutralized with alkalis or ammonia and optionally bleached with H<sub>2</sub>O<sub>2</sub>.

The reaction is carried out at temperatures of 20.degree - 50.degree. C., preferably with dissipation of the heat of reaction. Clear, relatively light-colored sulfonation products are obtained for high volume-time yields of the reactor. On completion of the reaction, the sulfonation products are neutralized with an alkali hydroxide, an ammonia solution or an amine and optionally bleached with H<sub>2</sub>O<sub>2</sub>. The desired degree of sulfonation of the products depends upon the purpose for which they are to be used and should be 3 to 30% by weight of organically bound sulfur trioxide.

Fats useful include: natural or synthetic triglycerides having average iodine numbers of above 20, more particularly natural fatty acid triglyceride mixtures or fatty acid

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triglyceride mixtures produced from natural vegetable or animal fats: which fatty acids are partly mono- or poly-unsaturated. Examples include: lard oil, neat's-foot oil, fish oil, rape seed oil, peanut oil, olive oil and their mixtures.

## Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-9, 12-20, 22-26 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Listemann.

Listemann teaches sulphated oil wherein the oil is sulfonated with sulfuric acid at temperatures below 40°C and neutralized with sodium hydroxide. It is also taught that the sulfonated shale oil has antifungal activity for all fungi tested.

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The claims differ in that the sulfonated oil is used to control or kill plant pathogens. While not explicated stated, it would be obvious to one of ordinary skill in the art that the sulfonated shale oil can be used to control or kill plant pathogens that are fungi in nature. The characteristic of the sulfonated shale oil to be affective in killing all fungi would be an inherent application of the shale oil, as would its ability to increase nutrient uptake and pH adjustment of the soil.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah D. Carr whose telephone number is 571-272-0637. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or

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access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or

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